

**Beltsville Agricultural Research Center  
Institutional Animal Care and Use Committee**

## Incident Report Form

*For use in reporting an incident not associated with research conducted on an approved animal use protocol form.  
Submit completed forms to the Veterinary Services, Animal Care Compliance Office or any member of the IACUC.  
[List of committee members](#)*

Principal Investigator or Unit Supervisor: N/A

Laboratory (if applicable): ABBL/APDL

Description of the Incident			
Date of Incident:	1/22-1/23/19	Reported by:	(b) (6)
Species of Animal:	Mouse	Number of Animals Involved:	129 (adults and pups)
Location of Event:	(b) (7)(C), (b) (6)		
Outcome:	<input type="checkbox"/> Trcatcd/Recovered <input type="checkbox"/> Trcatcd/Euthanized <input checked="" type="checkbox"/> Fatal <input type="checkbox"/> N/A		

**1. Provide a detailed description (include dates) of the incident and the cause, if known:**

The morning of Wednesday January 23, 2019 (budget shutdown still in place), animal rooms in (b) (7)(C), (b) (6) a small animal building were found to be severely overheated; this appeared to result from an overnight malfunction of the Heating, Ventilation and Air Conditioning (HVAC) system. One room had multiple mice dead due to heat stress and several litters needed to be euthanized due to death of the dam. An additional mouse died the next day, January 24<sup>th</sup>, after failing to respond to treatment. Other animal rooms also overheated during the incident, but no casualties were incurred in those rooms. In retrospect, it is possible that a mouse found dead on Monday the 21<sup>st</sup> may have also died from a room overheating (inconclusive).

In brief, the incident occurred after the 200-area boiler (heating system) malfunctioned on Saturday January 19, 2019, which caused an HVAC part (a "freeze stat") to become defective and subsequently caused room overheating on Monday January 21, 2019. Room temperatures were returned to normal on the 21<sup>st</sup> by redirecting airflow from the cooler hallways into the rooms. After the defective part was replaced on the afternoon of Tuesday, January 22, 2019, the HVAC system software program malfunctioned causing the animal rooms to severely overheat overnight and into the morning of Wednesday January 23<sup>rd</sup>. The incident was fully resolved by Wednesday afternoon once the software malfunction was corrected and the building temperatures returned to normal.

**2. Describe a plan of action for treatment and steps taken to prevent recurrence in the future:**

As described above, the incident was fully resolved on (b)(5) - Deliberative

**(b)(5) - Deliberative**

Brief summary of incident communications: The Institutional Official (IO) was notified about the overheated room and mouse death on Monday January 22, 2019 by the Attending Veterinarian (AV). The IO was provided updates on the HVAC and building status through Wednesday. The IO was notified of the overheating incident on Wednesday January 23, 2019, morning, and updated throughout the day. The AV was in contact with the Facility Services (FS) staff regarding the HVAC issues on Monday and throughout the incident until the resolution on Wednesday.

**3. Any additional information, extenuating circumstances, or other details that may be helpful in reviewing this matter:**

**Beltsville Agricultural Research Center  
Institutional Animal Care and Use Committee**

N/A

**Signature** 

**Date** 1/24/19

*This space reserved for use by the IACUC*

Reviewed by IACUC: ☒ Date: 3/7/2019

Additional findings and/or recommendations:

(b)(5) - Deliberative

(b)(5) - Deliberative

Beltsville Agricultural Research Center  
Institutional Animal Care and Use Committee

## Incident Report Form

For use in reporting an incident *not* associated with research conducted on an approved animal use protocol form. Submit completed forms to the Veterinary Services, Animal Care Compliance Office or any member of the IACUC.

[List of committee members](#)

Principal Investigator or Unit Supervisor: (b) (6)

Laboratory (if applicable): (b) (7)(C), (b) (6)

### Description of the Incident

Date of Incident:	September 25, 2019	Reported by:	(b) (7)(C)
Species of Animal:	Pig	Number of Animals Involved:	21
Location of Event:	(b) (6)		
Outcome:	<input type="checkbox"/> Treated/Recovered <input type="checkbox"/> Treated/Euthanized <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> N/A		

#### 1. Provide a detailed description (include dates) of the incident and the cause, if known:

See attached email correspondences to (b)(5) - Deliberative from September 25, 2019.

Pigs were exposed to a "natural infection" (an operational term based on an observation made in (b)(6) and (b)(6) that pigs in pens accompanying those that had been inoculated with *Ascaris suum* become infected adult worms; which is a very unusual observation). I wanted to confirm this observation by placing naïve pigs in (b)(6) soon after a prior oral inoculation of pigs to determine if this observation was reproducible. All the procedures used in that study were defined in protocol #17-019 but this specific experimental design was not described in that protocol.

#### 2. Describe a plan of action for treatment and steps taken to prevent recurrence in the future:

(b)(5) - Deliberative

#### 3. Any addition information, extenuating circumstances, or other details that may be helpful in reviewing this matter:

Refer to protocols #15-014 (b) (6) and #16-009 (b) (7)(C) for use of (b) (6) for pig studies

Signature: (b) (6) Date: 10/18/2019

This space reserved for use by the IACUC

Reviewed by IACUC: ☒ Date: 11/7/2019

Additional findings and/or recommendations: (b)(5) - Deliberative

(b)(5) - Deliberative

Beltsville Agricultural Research Center  
Institutional Animal Care and Use Committee

**(b)(5) - Deliberative**





**Beltsville Agricultural Research Center  
Institutional Animal Care and Use Committee**

## Unexpected Outcome (UO) Report Form

*For use in reporting an unexpected outcome associated with animals used in research. Refer for IACUC Policy #019.  
Submit completed forms to the Veterinary Services, Animal Care Compliance Office or any member of the IACUC.  
List of committee members*

Principal Investigator: **(b) (6)** IACUC Protocol # 18-008 Laboratory: **(b) (6)**

IACUC Protocol Title: Animal Breeding Program

Description of the Unexpected Outcome			
Date of Event:	Started in February 2019 to present	Date Identified:	February 11, 2019
Species of Animal:	Mus musculus	Number of Animals Involved:	15
Location of Event:	<b>(b) (6)</b>		
Outcome:	<input type="checkbox"/> Treated/Recovered <input checked="" type="checkbox"/> Treated/Euthanized <input type="checkbox"/> Fatal <input type="checkbox"/> N/A		
Was a veterinarian consulted regarding this event?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, list veterinarian name and date of consultation.		Name and Date: <b>(b) (6)</b> approximately May, 2019	
Is this event related to the research?		<input checked="" type="checkbox"/> Related <input type="checkbox"/> Possibly Related <input type="checkbox"/> Not Related	
Is the possibility of this outcome noted in the current approved protocol? If no, submit an amendment.			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, does the protocol accurately/adequately describe the outcome? If no, submit an amendment.			<input type="checkbox"/> Yes <input type="checkbox"/> No

*\*Note: Changes requested by amendment cannot be initiated until approved by the IACUC.*

1. Provide a detailed description (include dates) of the unexpected outcome, and the cause, if known:

In February of 2019 two female breeder TRSP/CD4-cre knockout mice were found with hind limb paralysis and euthanized. **(b) (6)** and I noted that this was odd but it wasn't until May of 2019, when three additional female breeder TRSP/CD4-cre knockout mice developed this phenotype and were euthanized, **(b) (5) - Deliberative** **(b) (5) - Deliberative**. It was noted that all the mice developing this were female breeder TRSP/CD4-cre knockout mice approximately 4 months old and the AV **(b) (6)** was contacted about this. **(b) (5) - Deliberative**

**(b)(5) - Deliberative**

## 2. Provide a description of how this unexpected outcome was managed (including treatments administered, etc.):

The AV was made aware of the situation as soon as it became clear it was not a one-off event. [REDACTED] and the animal care staff were made aware that the ascending paralysis may occur in this mouse strain to make sure we identified any mice with the symptoms early on. I continued to update [REDACTED] as more mice exhibited the phenotype and after she left and (b) (6) came to BARC, I immediately contacted her as well. Until recently, it was not clear what was going on. (b)(5) - Deliberative

(b)(5) - Deliberative

3. Has there been prior communication or consultation with a veterinarian concerning this or similar unexpected outcomes? ☒ Yes ☐ No ☐ N/A If yes, please provide details:

After several mice developed this phenotype [REDACTED] was informed and she observed the mice and was aware they were being monitored and euthanized if they developed symptoms. [REDACTED] also helped me learn how to do whole body perfusions after euthanasia as this is required in get the best quality spinal tissue for histological analysis which would aid us in determining what was afflicting these mice. After [REDACTED] arrival at BARC, I reached out and informed her of what was occurring and she came and observed one of the afflicted mice and was going to see if she could find a vet pathologist that would be interested in exploring this further. [REDACTED] has made some initial inquiries on my behalf.

## 4. Provide a description of actions taken to mitigate or prevent occurrence of this type of outcome in the future:

Until recently, it was not clear what was going on. (b)(5) - Deliberative

(b)(5) - Deliberative

(b) (6)

10/29/19  
Date

*This space reserved for use by the IACUC*

Reviewed by IACUC: ☒ Date: 11/7/2019

IACUC Remarks: (b)(5) - Deliberative

(b)(5) - Deliberative

Beltsville Agricultural Research Center  
Institutional Animal Care and Use Committee

## Incident Report Form

For use in reporting an incident associated with research conducted on an approved animal use protocol form. Submit completed forms to the Veterinary Services, Animal Care Compliance Office or any member of the IACUC.

[List of committee members](#)

Principal Investigator or Unit Supervisor: (b) (6)

Laboratory (if applicable): ABBL

### Description of the Incident

Date of Incident:	03/19/2019	Reported by:	(b) (6)
Species of Animal:	Chickens	Number of Animals Involved:	19
Location of Event:	Building (b)(6)		
Outcome:	<input type="checkbox"/> Treated/Recovered <input checked="" type="checkbox"/> Treated/Euthanized <input type="checkbox"/> Fatal <input type="checkbox"/> N/A		

### 1. Provide a detailed description (include dates) of the incident and the cause, if known:

**Description:** On March 19<sup>th</sup>, 2019, our acting (b) (6) informed me over the phone that (b) (6) had inspected (b)(6) and found that the chicken experiment were overdue one day (02/12/2019 to 03/18/2019), and only one cage involved with 4 chickens seemed to be crowded. Immediate action needed to be taken. We sacrificed these chickens right away on the same day. On May 21, 2019 at 1:00pm, I met and discussed the issues with (b) (6) Dr Craig Storozuk, Dr Long and (b) (6)

**Cause:**

(b)(5) - Deliberative

### 2. Describe a plan of action for treatment and steps taken to prevent recurrence in the future:

**Action:** After getting (b) (6)s call in the afternoon on 03/19/2019, our group immediately acted. (b)(5) - Deliberative

**Future preventive measurement:**

(b)(5) - Deliberative

### 3. Any addition information, extenuating circumstances, or other details that may be helpful in reviewing this matter:



Beltsville Agricultural Research Center  
Institutional Animal Care and Use Committee

If possible, I would like to volunteer to be a committee member in BARC IACUC. Thus, I could learn from the activities in IACUC and review the protocols as needed. After all, we have more new visiting scholars coming each year in our CRIS unit. Getting the professional guidance from authoritative members in IACUC is important for us to educate the researchers and reduce the misleading information and misunderstanding, therefore helping reducing the incidence.

(b) (6)

05/31/2019

Signature

Date

*This space reserved for use by the IACUC*

Reviewed by IACUC: ☒ Date: 6/6/2019

Additional findings and/or recommendations:

(b)(5) - Deliberative

(b)(5) - Deliberative





**Beltsville Agricultural Research Center  
Institutional Animal Care and Use Committee**

## Unexpected Outcome Report

Date of Event: 04/10/2019

Reported by: (b) (6)

Protocol # (If applicable): 17-022

Principal Investigator: [REDACTED]

Protocol Title:

Location of Event: [REDACTED]

Species of Animal: Mice

Number Animals Involved: 7

Is this event related to the approved research: Related ☒ Not Related ☐ Unsure ☐

Describe the Incident, providing any information available at this time regarding the cause of the Incident and its outcome:

Shipment arrived on April 2, 2019, and mice were individually housed on raised wire flooring, as described in approved protocol. On April 10, 2019, the lab found two mice dead and an additional 7 mice with health issues, and promptly notified the facility veterinarian of the problem. Upon evaluation, animals had poor body condition and low weights compared to aged matched counterparts. (b)(5) - Deliberative

**(b)(5) - Deliberative**

Describe any Plan of Action for treatment and to prevent recurrence. A finalized Plan of Action may be submitted later if needed:

The veterinarian discussed the incident with PI and lab. (b)(5) - Deliberative

**(b)(5) - Deliberative**

IACUC discussed incident at the May 2, 2019 convened meeting.

*This space reserved for use by the IACUC*

Reviewed by: IACUC ☒ Date: 5/2/2019

Additional findings and/or recommendations: No additional findings or recommendations were made by the IACUC. (b)(5) - Deliberative



**Beltsville Agricultural Research Center  
Institutional Animal Care and Use Committee**

## Incident Report Form

*For use in reporting an incident not associated with research conducted on an approved animal use protocol form. Submit completed forms to the Veterinary Services, Animal Care Compliance Office or any member of the IACUC.*

[List of committee members](#)

Principal Investigator or Unit Supervisor: (b)(6) Laboratory (if applicable): (b)(6)

### Description of the Incident

Date of Incident:	10/15/2019	Reported by:	(b)(6)
Species of Animal:	Pig	Number of Animals Involved:	12
Location of Event:	(b)(6)		
Outcome:	<input type="checkbox"/> Treated/Recovered <input type="checkbox"/> Treated/Euthanized <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> N/A		

1. Provide a detailed description (include dates) of the incident and the cause, if known:

Pigs under approved protocol #17-002 were allowed to be born, instead of euthanizing the pregnant sow on day 110 as was indicated in the proposal. (b)(5) - Deliberative  
(b)(5) - Deliberative

2. Describe a plan of action for treatment and steps taken to prevent recurrence in the future:

(b)(5) - Deliberative

3. Any additional information, extenuating circumstances, or other details that may be helpful in reviewing this matter:

(b)(5) - Deliberative

(b)(6)

Signature

10/15/2019  
Date

*This space reserved for use by the IACUC*

Reviewed by IACUC: ☒ Date: 11/7/2019

Additional findings and/or recommendations: The BARC IACUC met on 11/7/19 to review and discuss the described incident in this report. (b)(5) - Deliberative

(b)(5) - Deliberative